# STATE OF CALIFORNIA DEPARTMENT OF FUELIC WORKS BEFORE THE STATE ENGINEER AND CHIEF OF THE DIVISION OF WATER RUSOURCES

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In the Matter of Application 13868 by Mervin A. Grizzle to Appropriate Mater from Four Unnamed Tunnels Tributary via Pasedena Glen Canyon to Dos Appeles River in Los Appeles County for Domestic and Irrigation Purposes.

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Decision A. 13868 D. \_\_\_\_\_792

Decided June 3, 1954

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Appearances at Hearing Held at Los Angeles on February 27, 1952:

For the Applicant

Mervin A. Grizzle

Mervin A. Grizzle

For the Protestants

Phillips Finlay

Phillips Finlay

City of Pasadena

(Morris E. Jones, Chief Engineer (and Flmer L. Smith, Principal (Engineer, Water Department (Robert E. Michalski, Assistant (City Attorney

Mira Loma Mutual Water Company Bernard Potter Jr., Attorney

EXAMINER - GORDON ZANDER, Assistant State Engineer, for A. D. EDMONSTON, State Engineer.

Also present - Max Bookman, Principal Hydraulic Engineer, and J. J. Heacock, Senior Hydraulic Engineer, Division of Water Resources, Department of Public Works.

# OPINION

# General Description of the Project

The application contemplates an appropriation of 0.02 cubic foot per second, year-round, from a source described as four tunnels, tributary to Pasadena Glen Canyon, thence Los Angeles River, in Los Angeles County. The tunnels are further described as being located within the SWASER of Section 6, TIN BILW, SBEAM. The water is to be used for domestic purposes and irrigation on 5 acres situated within the SW1SW1 of Section 7 of the same township. Domestic use is to include service to 2 houses occupied by a total of 10 people. Appurtenant to the houses are a half acre of developed property including shrubbery and fruit, a swimming pool and a small fish pond. A few domestic animals also are to be watered. The area to be irrigated includes a 2 acre orchard, 2 acres of trees and shrubbery and an acre of lawn. Irrigation is to extend from June 1 to about December 31. The applicant states that the land to be irrigated has another source of water supply, i.e. water purchased from Kinneloa Water Company. Diversion is to be by gravity and the project includes a steel conduit 7000 feet long and falling a total of 1400 feet. Small rock and cement dams are to be provided at the tunnel entrances. In that connection the application states:

"It is estimated that tunnels Nos. 1 and 2 presently are each flowing approximately 2 gallons per minute. If cleaning and reconditioning does not sufficiently increase this flow to a total of approximately 9 gallons per minute, additional development work will be done on tunnel sites Nos. 3 and 4."

"Since a 2 inch pipe carries the water from the floor of each tunnel to the gathering line - - the cement and rock wall at the portal of each tunnel is only a barrier to prevent unnecessary clogging, contamination or entry into the tunnel."

According to the application the applicant does not own the site of the proposed point of diversion (the tunnels) but has requested written permission for access thereto, from the forest supervisor concerned.

## Protests

Phillips Finlay protests that the diversion proposed by the applicant will be prejudicial to his (Finlay's) and his wife's rights. He claims ownership, with his wife, of a 26.74 acre property located directly south of and below Davis Canyon. Said property, he states, is served by a right to Davis Canyon water as cited in the basic deed of May 10, 1883. In this connection he particularizes:

"This instrument (from Villiam Cogswell to John G. Kellogg) granted a perpetual flow of as much of Cogswell's share of Davis Canyon water as would flow through pipes of specified size direct from the mountain source. This right and another similar but smaller right owned by Mrs. F. R. Kellogg, constitutes a first lien on 75% of Davis Canyon water. This 75% interest is held, subject to our prior rights, by Mesa Mutual Water Company. Mira Loma Mutual Water Company owns the other 25% of Davis Canyon water. Our flow of water with existing equipment is a constant flow of approximately 10 gallons per minute.

"I consider that any tapping of the source of this supply of water - - is in distinct violation of our basic rights of many years standing. Assuming that he is proposing to tap the same source of water that is now supplying us by means of a tunnel, the withdrawal of any such quantity of water could dry up our supply completely. Any additional tunnels or wells tapping the Davis Canyon watershed is a very direct threat to our water security plus that of Mira Loma upon which we also depend for water as stockholders."

"I am hereby making official protest that the proposed appropriation of water - - is in violation of our rights and a threat to our whole water district - - . This matter will go to the courts if not arrested by other means."

The City of Pasadena protests that the surface flow and underflow of Pasadena Glen Canyon is contributory to the water supply of the Raymond Basin, that all the waters in the Raymond Basin are now being used and that the City of Pasadena, a party to the Raymond Basin Water Agreement, is the largest user from the Basin. It states that the ownership of the rights to the underground water in the Raymond Basin are set forth in the Superior Court judgment in Case No. Pasadena C-1323. It refers to the report by the Division of Water Resources in connection with that case.

The Mira Loma Nutual Water Company protests the application, asserting in that connection that it (the protestant) and Mesa Mutual Water Company now use and have used, since prior to December 19, 1913, all of the waters of Pasadena Glen Canyon, that the applicant's proposed point of diversion is upstream from its own points of diversion, and that diversions as proposed by the applicant would interfere with and decrease the supply of water available at such points. As to present and past use the protestant states:

"Protestant's predecessors in interest in and about July 12, 1880 appropriated and commenced to use, and protestant and Mesa Mutual Water Co. now does use all of the waters flowing in the canyon or gulch known as Davis Canyon. All of said water is diverted in each and every month and year and is used for domestic and irrigation purposes on land adjacent said Davis Canyon."

#### Answers

Answering the protest by the City of Pasadena the applicant

#### states:

"According to my inspections the water which we propose to capture for beneficial use is now lost after it flows from the tunnels, largely through evaporation from the precipitous rocky mountain side aided by some transpiration from patches of moss and other forms of native vegetation.

"It seems evident that capture and conveyance of the water in question, by means of a closed pipeline to the point of beneficial use, located approximately 1400 feet lower and two miles nearer to the Basin would result in greater conservation for all concerned.

"Also if it can be proved that drainage from either point on the slope of the mountain side is contributory to the Basin water, then logically water applied to the lower and closer location would be even more beneficial."

Answering the protests by Phillips Finlay and Mira Loma Mutual

# Water Company the applicant states:

"--- we believe their protests to be for the most part technical in nature, by reason of their vested rights in the flow of certain drainage adits located along the walls of the Pasadena Glen Canyon, a mile or so south easterly of subject source.

"Since they are quite familiar with the location and history of all the conditions involved, I assume that it would be illogical for them to over stress any questionable interference, otherwise they would have made some attempt to directly acquire the water from the source in question.

\*Our only purpose is to maintain a source of spring water for our direct use, backed by a commerical supply of water to be purchased from whatever utility supplying this area that is in or will become a part of the Metropolitan Water District - - -."

"It seems evident that capture and conveyance of the water in question, by means of a closed pipe line to the designated point of beneficial use, could logically contribute to the adjacent property served by Mira Loma and even to the Mira Loma well located only a few hundred feet SW of my property.

"The location of the tunnels in question are such that they are much more sensitive than any down stream source and any seasonal change would affect their flow first and to a much greater degree.

"Since they are fed by a relatively small radial part of the great amphitheater which extends above the head of the Pasadena Glen Canyon, the effect, if any, could never be a serious one.

"It is reasonable to anticipate a reversal in the present dry cycle, before actual appropriation could be renewed."

# Hearing Held in Accordance with the Water Code

Application 13868 was completed in accordance with the Water Code and the Rules and Regulations of the Division of Water Resources and, being protested, was set for hearing, under the provisions of Article 13, Section 733(a) of the California Administrative Code, Title 23, Waters, on Wednesday, Tebruary 27, 1952 at 2:00 o'clock P.M. in Room 203, California State Building, Los Angeles, California. Of the hearing the applicant and the protestants were duly notified.

# Hearing Testimony

Relevant testimony elicited at the hearing of February 27, 1952 includes the following:

Applicant Grizzle, in lieu of direct testimony, submitted (page 8 of transcript) a signed statement (marked Applicant's Exhibit "A"), formally outlining his position and setting forth certain alleged facts, the body of that document reading:

"This is essentially an application to rehabilitate an old source of spring tunnel water, to serve as a part of our requirements, as previously used by former owners of Kinneloa Ranch property, over a past period of 40 or more years.

"Present existence of the old tunnels and pipe line furnish positive evidence of the past and present situation.

"Title to the 10 acres of mountain property, upon which subject spring tunnels are located, passed from private to Federal ownership, July 12, 1950 by direct cash purchase and is included within Angeles National Forest.

Field inspection should indicate that the relative location of said source tunnels is such as to threaten no interference with the rights and useful supply of the protestants.

"Subject tunnels are some 3000 or more feet to the N. W. at approximately 800 feet higher elevation and on the opposite side of the canyon, high into a side ravine, from protestant's tunnel in the deep lower portion of Pasadena Glen Canyon.

"The actual and small part of the Pasadena Glen Water shed which could be either directly or indirectly tapped by the proposed appropriation is but a fractional percent of the total drainage area.

The proportional amount of water recovered from Pasadena Glen tunnels by Mira Lona Mutual, Phillips Finlay, Mesa Mutual et.al. is a very minor part of the water requirements of their properties. Other sources such as wells supply the bulk of their total requirements.

"The amount of water in subject application (approx. I M.I.) is but a fraction of the amount by record (4 to 10 M.I.) previously appropriated by Kinneloa Ranch owners.

"The location of applicants property which would be irrigated by the water from proposed source is top-graphically favorable to seepage in the direction of two or three of the Mira Loma Mutual water wells, and water so applied could possibly result in a greater rather than less recovery by them.

"It is my understanding from the record that the flow from subject tunnels is more sensitive to seasonal conditions, than are the lower and more favorably located tunnels, which leads to the deduction that the overall effect of the upper tunnels is of minor significance.

"The attached enlargement of the N.W. corner of the Sierra Madre Quadrangle is offerred as a topographic reference sheet, showing the general relationship of the source tunnels, pipeline and point of beneficial use.

"The actual objective of this proposed appropriation is to supplement rather than replace our present source of water. However since the present source has been detached from the land which it supplies and is now in the hands of a privately operated water company who anticipates securing auxiliary water from M.W.D. through the foothill Municipal Vater District, we will have no way of controlling the source of our delivery. Therefore we are ambitious to have an independent source for a small but reasonable quantity of spring tunnel water to which we have become accustomed."

On cross examination Mr. Grizzle testified (page 34 of transcript) that according to his understanding water from the tunnels from which he wishes to appropriate was used by his predecessor in interest until 1943, that no water from said tunnels has been diverted to his (Grizzle's) property or elsewhere in the last 5 years, and that in his opinion the water is unappropriated.

Protestant Finley testified (pages 10 to 16 of transcript) to the effect that he is directly interested, both on his own account and as a stockholder of Mira Loma Mutual Water Company, that Davis Canyon and Pasadena Glen Canyon are one and the same, that his 26 3/4 acre property was granted a right to waters of Davis Canyon by virtue of deeds executed May 10, 1863 and February 3, 1885, that Mira Loma Mutual Water Company also holds vested rights to waters of Davis Canyon, that it is his understanding that all water flowing in Davis Canyon is appropriated, that he will be pleased to furnish copies of the deeds mentioned to the Division, that the water to which he and Mira Loma Mutual Water Company are entitled heads at 2 tunnels some distance above the so called falls in Davis Canyon, that he has been using personally the water in question since June, 1940, that under his right he "takes first" and if there is anything left it flows through an overflow pipe into the Mesa Mutual Water Company reservoir.

Robert Casamajor testified to the effect that as President of the Mira Loma Mutual Water Company for the past 15 years he is familiar with the water system and sources of water of that company, that one of the company's sources is Davis Canyon, that the company's uppermost intake on Davis Canyon is a tunnel from which water is carried in a pipeline, that that tunnel is driven 542 feet into the west wall of the canyon, that there also is a second tunnel, located on the east side of the canyon, as well as a diversion tunnel "at the base of the falls" from which water is piped to Vosberg Reservoir, that farther down the canyon there is a well,

known as "Glen Well," also 2 other tunnels known as "Tent Tunnel" and "Spencer Tunnel," that the "water-workings" mentioned are all producing water the year round, and that water from the "water-workings" is piped to the company's various reservoirs from which it is distributed to customers. Mr. Casamajor further testified that the only water that the Mesa Mutual Water Company receives from Davis Canyon comes from the 2 first described tunnels, that water from those tunnels is divided between Mira Loma Mutual Water Company and Mesa Mutual Water Company, that the water which Mr. Finlay and Mrs. Kellogg receive is taken out of the Mesa Mutual Water Company's share, that the Mira Loma Mutual Water Company's share goes to that company's customers, that Mira Loma Water Company has approximately 160 stockholders, all of whom receive water from that company and from nowhere else, that annual deliveries to stockholders range between 5.5 and 6.25 million cubic feet per year, that an estimated 30 to 35 per cent of deliveries to stockholders is taken from Davis Canyon, and that water has been used continuously, winter and summer, during the last 15 years.

## Field Investigation

At the hearing of February 27, 1952 it was recognized that certain facts could be ascertained better by field investigation than from the testimony of witnesses. Arrangements for such investigation were made at the conclusion of the hearing and the parties concerned were so informed. The investigation itself was made on February 28, 1952, by Senior Engineer J. J. Heacock and Associate Engineering

Geologist Lawrence B. James, both of the Division of Water Resources.

Interested parties attending the investigation were Applicant Grizzle,
and Dr. L. T. White, Director and John Griffin, Superintendent, Mira

Loma Mutual Water Company. Protestant Finlay appeared before the field
trip started and met the group after the inspection.

Extracts from the report covering the field investigation just mentioned are as follows:

"On February 28, 1952, a reconnaissance was made of Pasadena Glen Canyon for the purpose of investigating the relationship between the geology of this area and the occurrence and movement of surface and sub-surface waters."

"Pasadena Glen Canyon is located on the south slopes of the San Gabriel Mountains northeast of Pasadena."

"The San Gabriel Mountains in general comprise an immense fault block .... This block consists chiefly of crystalline igneous and metamorphic rocks which are impervious to the flow of ground water, except where traversed by open fault planes or fissures."

"The walls of Pasadena Glen Canyon are steep being precipitous throughout much of its length. The floor is narrow, ranging in width from a few feet near the headwaters to about 15 feet in the vicinity of the lower infiltration adits of the Mira Loma Mutual Water Company. The stream profile is also steep descending from an elevation of about 2800 feet at the upstream adits to an elevation of about 1500 feet at the lower adits, the reach between these points being roughly one mile in length."

"The streambed in places is filled with coarse detrital materials but frequently crosses water-worn exposures of granitic bedrock."

"First inspected were infiltration adits developed by the applicant's predecessors. Reportedly four of these adits exist in the area designated 'A' .... Only two open adits were found. One of these extended into granitic rock about ten feet. The second was explored its full length of about

125 feet and was found also to penetrate only granitic rock. Water supplying this second adit is derived from small fissures which cut the hanging wall and sides. Entrances to the remaining adits were buried ...."

"Proceeding downstream ... four points of particular ... interest were detected. Commencing at point 'B' (about 0.29 mile below 'A') the streambed was filled with coarse debris into which surface water percolated. Point 'C' (about 0.44 mile below 'A') marks the end of flow of the stream, all waters having percolated upon reaching this point. At point 'D' (about 0.53 mile below 'A') massive water-worn granitic bedrock is exposed in both walls and floor of the canyon. No rising water was passing point 'D', and no alluvial covering existed at this point through which underflow could occur. Between points 'B' and 'D' weathered fissures were observed in the canyon walls. These fissures appeared to strike in random directions. ... no joint pattern could be established."

"At point 'E' (about 0.83 mile below 'A') a contact exists between the granitics found upstream and a highly fractured gneiss. Rising water was noted at this contact and also at many of the fractures in the gneissic material. This adit is reportedly 600 feet long and receives water from fissures which it cuts. The protestant's second tunnel at point 'F' (about 1.0 mile below 'A') is collared in crystalline igneous rock. This tunnel is reportedly 350 feet long and is also supplied from fissures in the rock."

The investigator finds, in his report of field investiga-

#### tion:

- \*1. That the supply to infiltration adits of both applicant and protestants is derived from precipitation falling upon the watershed lying above these adits.
- 2. That the adits are fed through fissures and joints in the granitic or gneissic bedrock.
- "3. That the water sought and available under Application 13868 flows in the upper reaches of Pasadena Glen Canyon, that part of the flow in said canyon is in part consumed by evaporation and transpiration of

native vegetation and part percolates into fissures in the walls and floors of the canyon, and that the fissures into which percolation occurs could be interconnected with fissures supplying the protestant's acit.

"4. The fissures into which the flow of the upper reaches of the canyon percolates discharge at downslope points. This is obvious since otherwise such fissures would long since have filled with water, and the percolation now observed could not take place."

The investigator concludes:

"The amount of water sought and available under Application 13868 is not of sufficient magnitude to have any appreciable effect on the water supply of the protestants.

"The amount of water sought and available under Application 13868 would probably be lost by evapo-transpiration processes prior to its reaching the protestant's point of diversion."

# Information from Other Sources

Raymond Basin is the name given to the portion of San Gabriel Valley that is separated from the remainder of that valley by the so-called Raymond Fault. It contains the City of Pasadena and it is bounded on the north by the San Gabriel range of mountains, the drainage from which includes, among other streams, Pasadena Glen Canyon. The alluvial valley floor of the Raymond Basin area is about 40 square miles in extent and it is highly urbanized. Water was used as early as 1771, by diversion from streams originating in cienagas along Raymond Fault. Progress was gradual until an influx of population into Southern California led to larger scale developments including exploitation of the streams and springs of the

adjacent mountains. Wells are said to date from 1881 but their number has increased rapidly. Prior to 1920 alarm was felt concerning the expanding use of ground water and the falling water table. In 1934 the local supply was reinforced by the construction of a 38,000 acre-foot reservoir on San Gabriel River and a 30 second-foot pipeline leading therefrom to Pasadena. At the same time artificial recharging of strata underlying the Basin began. These statements concerning Raymond Basin are based upon information contained in the report (in 1943) of the referee (Division of Water Resources) in the matter of City of Pasadena vs. City of Alhambra et al., No. Pasadena C-1323, Superior Court in and for Los Angeles County. With reference to ground water that report states (on page 6):

"The lowered water table has caused some of the organizations below Raymond Fault whose supplies had for a long time come entirely from wells immediately above the Fault and within the Area to substitute other supplies from San Gabriel Valley proper and reduce their takings or cease production from the Area entirely because wells could not be further deepened and the yield had become uneconomically small."

Proceeding No. Pasadena C-1323 (City of Pasadena vs. City of Alhambra et al.) was a comprehensive adjudication of multiple rights to extract ground water from Raymond Basin. The Complaint which led to said proceeding was filed in September, 1937; the Judgment is dated December 23, 1944. The Decree recognizes the Raymond Basin Area as being subdivided into an eastern unit and a

western unit and finds that the safe yields of the two units are 3,900 and 18,000 acre-feet per annum respectively; that the amounts taken by non-parties to the action within the two units are 109 and 340 acre-feet per annum respectively; and that the demand on the basin greatly exceeds the safe yield. The Decree sets forth what it terms the present unadjusted right of each of the parties and then imposes limitations upon the exercise of the unadjusted rights so that the takings will not exceed the safe yield. It provides that the Court shall reserve jurisdiction and authority to review its determination of safe yield or of the rights in the aggregate of all of the parties of either or both of the two units and that it shall reserve jurisdiction and authority in certain other matters. The Decree provides for appointment of the Division of Water Resources as watermaster to administer the takings under the adjusted rights as set forth in Paragraph V of the Decree. Watermaster service has been furnished in accordance therewith continuously since April 5, 1944. Paragraph II of the Decree reads in part as follows:

"That as to those parties hereto who are taking or diverting water for beneficial use from any source contributing to the supply of water in the ground in said Raymond Basin Area, each of said parties has the right as against all parties ... to continue to divert from such source for such use an amount of water measured by the maximum capacity of its diversion works and other facilities as the same existed at any time within five (5) years prior to October 1, 1937."

## Discussion

In view of the above-mentioned Court Decree the protestants against the approval of Application 13868 appear entitled to all flow reaching their respective intakes, up to the capacity of their diversions and related facilities. According to the report of the investigation of February 28, 1952 however, no more than an insignificant fraction, if any part at all, of the 0.02 cubic foot per second filed upon carries through to the intake of any protestant, that water instead being either lost by evapo-transpiration en route or widely dissipated by percolation into the fissures that strike in random directions through the otherwise impervious rock. The comparative remoteness of the source filed upon (the tunnels) from the protestants' points of diversion, the inconsequential amount of water involved, the absence of proof that any impairment of protestants' water supply will result from the proposed appropriation and the probability that any impairment that does result will be inappreciable point to the conclusion that the protestants' objections are insufficient to warrant disapproval of the application.

# Summary and Conclusion

The applicant seeks to appropriate 0.02 cubic foot per second from 4 unnamed tunnels tributary via Pasadena Glen Canyon to Los Angeles River in Los Angeles County for domestic purposes and irrigation.

The application is protested by Phillips Finlay who contends that any diversion from the headwaters of Davis Canyon (another name for

Pasadena Glen Canyon) would diminish the supply to which he is entitled; by Mira Loma Mutual Water Company for substantially the same reason as advanced by Protestant Finlay; and by the City of Pasadena which states that it is supplied from ground water underlying Raymond Basin, that such water is supplied in part from Pasadena Glen Canyon and that the diversion from Pasadena Glen Canyon that the applicant proposes would therefore diminish its (the City's) water supply.

The applicant answers the protestants by asserting that the water which he seeks to appropriate is presently lost by seepage and evaporation and that it would be advantageous to the protestants if he should pipe that water, as he proposes to do, some two miles nearer their respective points of diversion.

The application was heard on February 27, 1952 at Los Angeles. In order to supplement the hearing testimony a field investigation was conducted by division personnel accompanied by interested parties on the following day. The investigation found that the amount of water sought under the application and available from the sources therein designated would probably be lost by evapo-transpiration before reaching the protestants by the appropriation sought would be inappreciable.

In view of the circumstances it is the opinion of this office that the objections raised by the protestants are insufficient to bar the approval of Application 13868, that unappropriated water exists in the sources from which the applicant seeks to appropriate, that such

water may be taken and used beneficially in the manner proposed without appreciable injury to any protestant and that the application should therefore be approved and permit issued, subject to the usual terms and conditions.

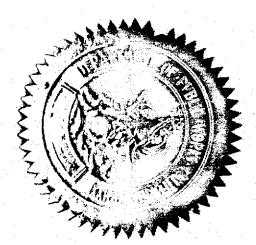
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#### ORDER

Application 13868 having been filed with the Division of Water Resources as above stated, protests having been filed, a public hearing having been held and the State Engineer now being fully informed in the premises:

IT IS HEREBY ORDERED that Application 13868 be approved and that a permit be issued to the applicant, subject to such of the usual terms and conditions as may be appropriate.

witness my hand and the seal of the Department of Public Works of the State of California this \_\_\_\_\_ June 3, 1954



A. D. Edmonston State Engineer